

Revision checklist

Grade 8

Number

- ☐ Complex surd manipulation and rationalisation
- ☐ Exact values in multi-step calculations
- ☐ Bounds problems involving several operations and formulae

Algebra

- ☐ Complex algebraic fractions
- ☐ Completing the square to find turning points and roots
- ☐ Quadratic inequalities and graphical interpretation
- ☐ Composite functions and inverse functions in multi-step problems
- ☐ Iteration and numerical solutions
- ☐ Graph transformations
- ☐ Circle equations and tangents
- ☐ Algebraic identities used to prove equivalence
- ☐ Non-linear graphs and their intersections
- ☐ Gradients and areas under curves

Ratio and proportion

- ☐ Complex algebraic proportionality
- ☐ Combined direct and inverse proportion
- ☐ Growth and decay in unfamiliar contexts
- ☐ Problems linking proportion, graphs and geometry

Geometry

- ☐ Complex circle theorem proofs
- ☐ Vectors used in formal geometric proofs
- ☐ Multi-step 3D trigonometry
- ☐ Composite shapes involving similarity and trigonometry
- ☐ Advanced use of sine rule, cosine rule and triangle area formula

Probability

- ☐ Conditional probability and combined events
- ☐ Multi-stage problems combining trees, Venn diagrams and tables

Statistics

- ☐ Multi-step histogram and cumulative frequency questions
- ☐ Statistical comparisons requiring justification
- ☐ Interpreting limitations and reliability of data